



Rain Water Harvesting

Rainwater harvesting is the most common system type, and Wahaso specializes in commercial rainwater harvesting systems. Unlike the more simple systems installed by homeowners, our rainwater harvesting systems are designed with the commercial-grade components and sophisticated controls required in commercial buildings for reliability, automated functions and connectivity to BAS systems.

Rainwater



Rainwater collection and storage, (also known as “rainwater catchment”), has been practiced for centuries by cultures throughout the world. Even in the U.S., most 19th century and early 20th century homes had cisterns that saved rainwater from roofs to use for washing clothes and watering gardens. In industrial countries, the practice had largely died away with the introduction of reliable modern water supply systems. This trend is now changing.

Rainwater is free and mostly clean and requires less treatment than greywater, so it is an ideal source of water for harvesting.

“Rainwater” by definition is precipitation that is collected from relatively clean, above-ground surfaces – usually rooftops. Because rooftop rainwater has minimal contamination, it is an ideal source for harvesting. In commercial buildings, the large rooftop areas can often collect enough rainwater to meet all the non-potable uses like toilet flushing and irrigation.

Applications For Harvested Water



Depending on the building's location and function, other uses for the harvested water may be considered. During the Consulting Phase, Wahaso can help assess the most effective approach for managing the supply and demand of harvested water for any project.

Cooling Towers – Cooling towers can be large consumers of water – 40% or more for a typical office building – and are an excellent use of harvested water. A typical commercial building with an evaporative cooling system can use 2-3 million gallons of water in a season to “make-up” water lost through evaporation and the “blow-down” cleaning cycle. Read more about water harvesting and cooling towers.

Using Harvested Water in Cooling Towers Boiler Make-Up – Boilers in a commercial building can consume thousands of gallons of water per day. Harvested water can serve as “make-up” for water lost in the heating cycle.

Greywater Sources

Greywater, (also called grey water, graywater and gray water) refers to water that has been “gently used” in sinks, showers, baths and light industrial applications and has not yet been treated. It is clearly distinguished from water from toilets – know as “black water”. Properly filtered and stored, greywater can be a valuable source of water to flush toilets and urinals or irrigate landscaping. Toilet flushes can account for 25 – 65% or more of the total water use in a commercial building, even when low-flush fixtures are used.



An efficient greywater system first requires a steady source of greywater. The most abundant source is showers in buildings with full time residents – apartments, dormitories, hotels, schools, etc. Some manufacturing facilities can harvest water used in their manufacturing processes if it is not heavily loaded with contaminants. Office buildings generally do not produce enough usable greywater to warrant the cost of a system.

We can also recommend resources for working with your municipality to set standards for greywater collection, filtering, storage and use.

**For more information please
visit**

<http://www.wahaso.com>